Claims

1. Process for the production of a catalyst preparation, characterised in that the catalyst containing at least one inorganic compound which is solid under standard conditions is comminuted by means of a dispersion unit into particles having a maximum average particle size $d_{50,3}$ of 2 µm, implemented in accordance with DIN 66141 and DIN 66144, and is distributed at a concentration of from 1 to 50 wt.%, relative to the finished catalyst preparation, in a liquid.

2. Process according to Claim 1, characterised in that the catalyst is distributed in a liquid at a concentration of from 20 to 40 wt.%, relative to the finished catalyst preparation.

3. Process according to Claim 1 or 2, characterised in that the solid inorganic compound is selected from the following substances: titanium dioxide, titanium-dioxide-containing substances, titanates, zeolites, aluminium oxide, boron oxides, germanium dioxide, antimony(III) oxide, cerium oxides, barium sulfate, zinc sulfide, silicon dioxide or mixtures of these substances.

4. Process according to Claim 3, characterised in that the solid inorganic compound is selected from the following substances: hydrated titanium dioxide corresponding to the composition $y\ TiO_2 \cdot z\ H_2O$ (where y = 1, z = 0.01 to 2), or a titanate corresponding to the composition $(Me_nO)_x \cdot (TiO_2)_y \cdot (H_2O)_z$ (where Me = Li, Na, K, Rb, Cs, Mg, Ca, Sr, Ba; n = 1 for Me = alkaline earth metal and n = 2 for Me = alkali metal; x = 0.0001 to 6; y = 1; z = 0.01 to 2).

5. Process according to one of Claims 1 to 4, characterised in that the particles have a maximum average particle size $d_{50,3}$ of 1 µm.

6. Process according to one of Claims 1 to 5, characterised in that the following are utilised as a particle comminution unit: stirred ball mills, ultrasonic homogenisers, or ultrasonic disintegrators, high-pressure homogenisers, dispersing equipment based on the high-power pulse-type technique, dispersing equipment based on the impact jet process (for example counter-jet-type mills) or impact stream-type mills (for example microjet dispersers).

7. Process according to one of Claims 1 to 6, characterised in that as the liquid the following substances are utilised individually or in mixture: water, alcohols having 1 to 20 C atoms, diols, carboxylic acids or fatty acids.

8. Use of the catalyst preparation produced by a process according to one of Claims 1 to 7 in condensation and polycondensation reactions, in transesterifications of esters, in transamidations of amides, in rearrangements and in olefin polymerisation.

9. Use of the catalyst preparation produced by a process according to one of Claims 1 to 7 for photocatalysis.

10. Use of the catalyst preparation produced by the process according to one of Claims 1 to 7 for boosting the effect of catalyst enzyme systems.